

Simulations
Photos
All Graphics (no plans)



CONTEXT PHOTO MAP

**17-UP-2012#4 & 61-UP-
1997#5
04/04/2019**



CONTEXT PHOTO A1



CONTEXT PHOTO A2



CONTEXT PHOTO A3



CONTEXT PHOTO A4



CONTEXT PHOTO B1



CONTEXT PHOTO B2



CONTEXT PHOTO B3



CONTEXT PHOTO B4



CONTEXT PHOTO C1



CONTEXT PHOTO C2



CONTEXT PHOTO C3



CONTEXT PHOTO C4



CONTEXT PHOTO D1



CONTEXT PHOTO D2



CONTEXT PHOTO D3



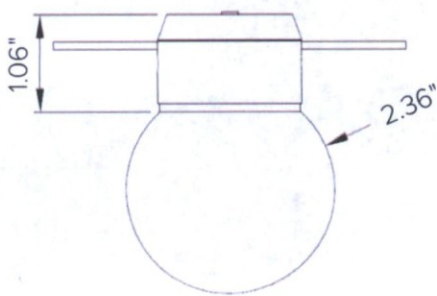
CONTEXT PHOTO D4



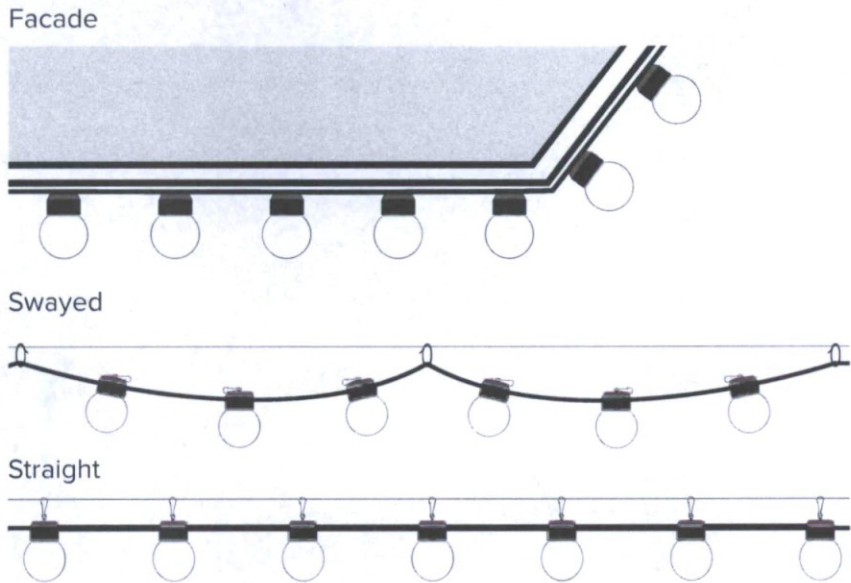
Key Features

- Perfect for festoon mounting, taught or swayed.
- 16 gauge conductive cable with factory attached sockets.
- Available in 2300°K static warm white or addressable full color 24Bit RGB, individually addressable lights for dramatic full color lighting effects.
- Lamp spacing available in 12” OC and 24” OC.
- Flat base can be easily mounted against a wall or ridged surface.
- Max continuous length: 50’ max per run (12” OC)
100’ max per run (24” OC)
- Multiple dimming options available, see power supply selections.

Dimensional Drawings



Installation Examples



Ordering Guide

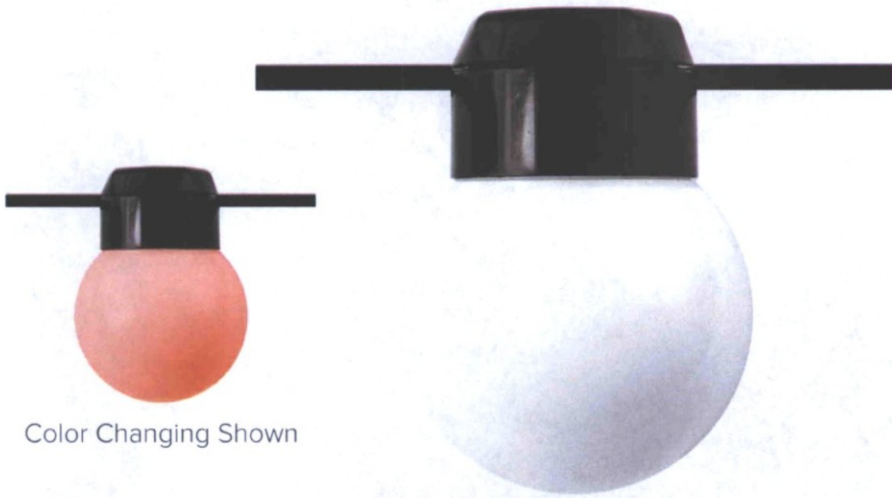
PRODUCT CODE	TYPE	WATTAGE	COLOR TEMP	SOCKET SPACING	VOLTAGE	+	POWER SUPPLY
IN —Intellistrand	CL — Cable Light	1 — 1.1W	WW — 2300K FC — RGB	12 — 12” OC 24 — 24” OC	24 — 24VDC		

Fixture is project specific and manufactured to order, longer lead times may be expected based on a project by project basis.
Please consult factory for more information.

INTELLISTRAND
CABLE LIGHT

Low voltage cable light

Low voltage dual circuit cable light available in various spacing. Strand is capable of static Warm White or RGB. For indoor and outdoor lighting applications.



Color Changing Shown

Static White Shown



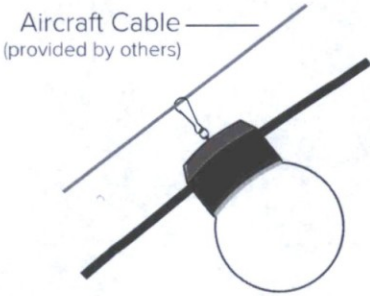
Details

Spacing	12” or 24” OC Socket Spacing
Color Temp	Available in 2300°K and RGB
Wattage	1.1W per socket
Installation	Attach to aircraft cable (provided by others) and to be secured with cable ties (provided by others). Optional cable wrap encases aircraft cable and Intellistrand cable for a clean one wire look (see page 2).
Power Supply	Listed Class 2 output, 24 VDC power supply required
IP Rating	IP65
Certifications	cETLus Class 2 Wet Listed 4007019 Tested in accordance with LM-79-08 ^Title 24 commercial installation compliant.
Warranty	3 year warranty

Fixture Data

Model	Efficacy* Lm/Wt	Lm/Bulb	Wt/Bulb
2300°K	61.00*	67	1.1

* Meets Title 24 High efficacy rating.

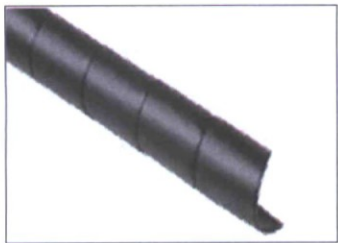




INTELLISTRAND

CABLE LIGHT

Mounting Accessories (Optional)



DLDSLWRAP

1/2" Diameter black spiral cable wrap for use with aircraft cable. To encase aircraft cable and DuraLED Light Cable for a clean 1 wire look, sold per foot. **(1.5ft of Wrap needed to span evenly per 1ft of cable)**

Static White Power Supplies Options ONLY

Power Supply (REQUIRED)	Type	Wattage	Input/Output Voltage	Dimmable	IP Rating	Output	Dimensions
DEL60PWM	ELECTRONIC PWM DRIVER STANDALONE, UL LISTED ENCLOSURE PROVIDED BY OTHERS	60W	120-277V / 24V	0-10V/PWM 10%	IP67	UR CLASS 2	5.9" X 2.09" X 1.38"
DEL90PWM	ELECTRONIC PWM DRIVER STANDALONE, UL LISTED ENCLOSURE PROVIDED BY OTHERS	90W	120-277V / 24V	0-10V/PWM 10%	IP67	UR CLASS 2	6.73" X 2.48" X 1.48"
DEDD10010	ELECTRONIC 0-10V DRIVER STANDALONE, UL LISTED ENCLOSURE PROVIDED BY OTHERS	100W	120-277V / 24V	0-10V DIMMING 0.1%	IP20	UR CLASS 2	6.02" x 1.97" x 0.91"
DELV40124D	ELECTRONIC LOW VOLTAGE TRANSFORMER	40W	120-277V / 24V	PHASE (120V ONLY) /0-10V DIMMING 10%	IP66 / NEMA4 ENCLOSURE	UL CLASS 2	11" x 4" x 2.21" ¹
DELV96124D	ELECTRONIC LOW VOLTAGE TRANSFORMER	96W	120-277V / 24V	PHASE (120V ONLY) /0-10V DIMMING 10%	IP67 / NEMA4 ENCLOSURE	UL CLASS 2	11" x 4" x 2.21" ¹
DELX601241CPWM	ELECTRONIC PWM DRIVER	60W	120-277V / 24V	0-10V/PWM 10%	IP67 / NEMA3R ENCLOSURE	UL CLASS 2	10" x 10" x 4" ¹
DELX901241CPWM	ELECTRONIC PWM DRIVER	90W	120-277V / 24V	0-10V/PWM 10%	IP67 / NEMA3R ENCLOSURE	UL CLASS 2	10" x 10" x 4" ¹
DELX1802242CPWM	ELECTRONIC PWM DRIVER	2X90W	120-277V / 24V	0-10V/PWM 10%	IP67 / NEMA3R ENCLOSURE	UL CLASS 2	12" x 12" x 4" ¹
DELX2703243CPWM	ELECTRONIC PWM DRIVER	3X90W	120-277V / 24V	0-10V/PWM 10%	IP67 / NEMA3R ENCLOSURE	UL CLASS 2	12" x 12" x 4" ¹

¹ Dimensions include enclosure with mounting bracket.
* Constant voltage drivers 50/60HZ, voltage regulated with short circuit protection. Operating temperature -40 C- 80° C
* Installation of power supply must be compliant to Class 2 installation standards. Refer to NEC and local building code requirements.
* Consult factory for additional driver options (ie: DMX, DALI, wattage, size, shape, Lutron, ELDO, or others).

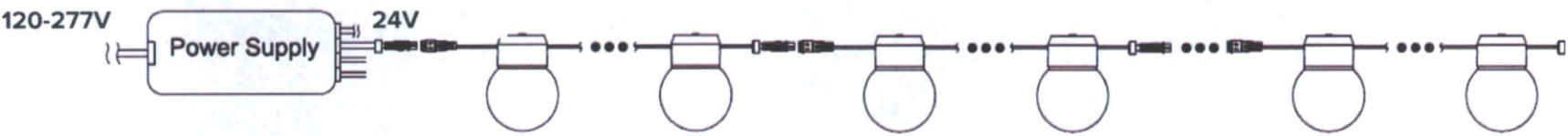


INTELLISTRAND

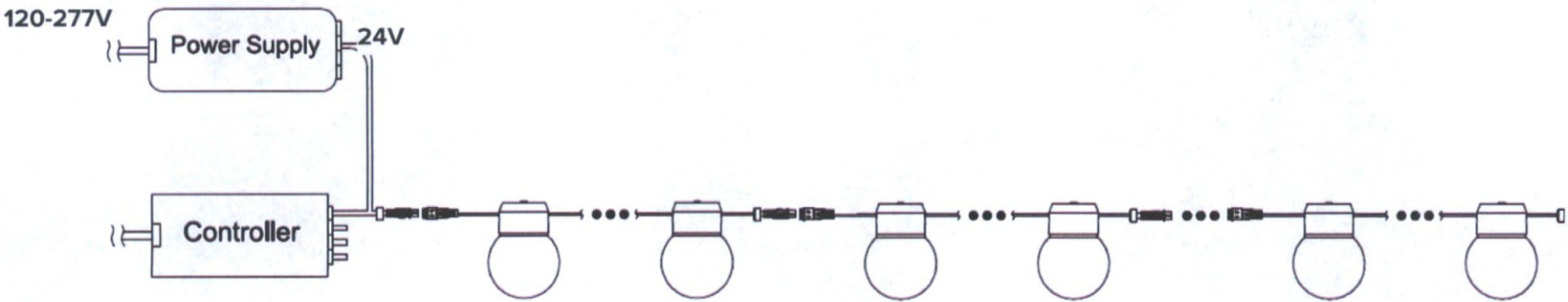
CABLE LIGHT

System Layout Example Diagrams

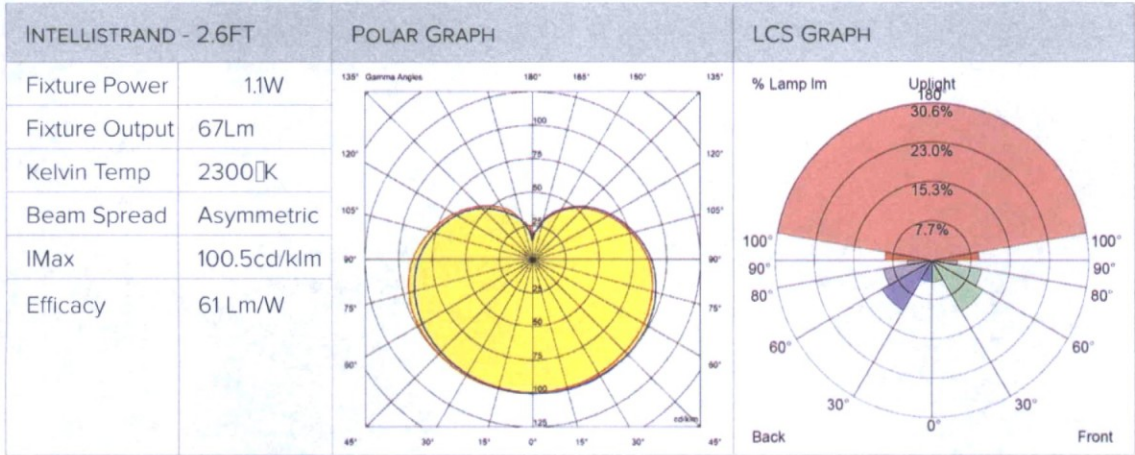
Static White



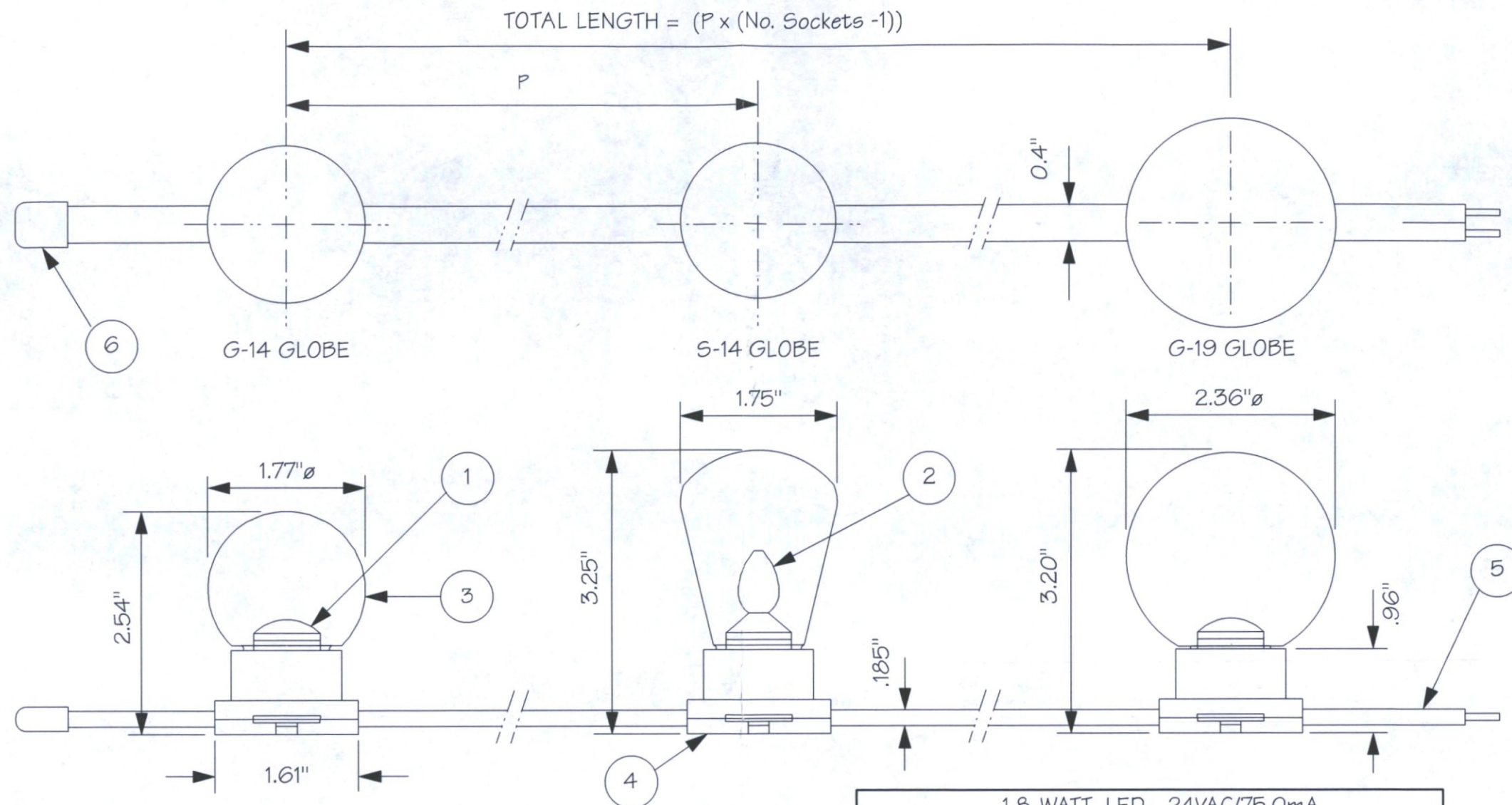
RGB Color Changing



Photometry



EXHIBITOR SERIES - 1.8 WATT LEDs



CATALOG#	P(INCH)	MAXIMUM LENGTH
EX(BK,WH)-6-(LED CODE)-(G14, S14, G19)	6" ± .075	125'
EX(BK,WH)-12-(LED CODE)-(G14, S14, G19)	12" ± .075	200'
EX(BK,WH)-18-(LED CODE)-(G14, S14, G19)	18" ± .075	225'
EX(BK,WH)-24-(LED CODE)-(G14, S14, G19)	24" ± .075	250'

CABLE COLOR CODE: BK=BLACK, WH=WHITE

1.8 WATT LED 24VAC/75.0mA			
PART#	LED CODE	COLOR	LUMEN
EX-VI-LW	VILW	2000K	36LM
EX-VI	VI	2400K	40Lm
EX-UB-LW	UBLW	2000K	41Lm
EX-UB	UB	2400K	45Lm

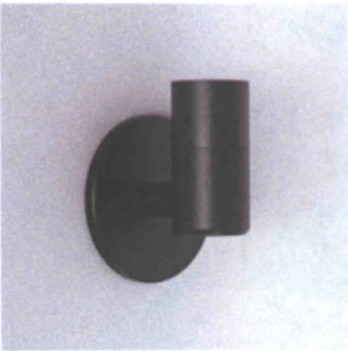
VIRTUAL INCANDESCENT LED (EX-VI) NOT RECOMMENDED FOR USE WITH FROSTED GLOBES



TOKISTAR LIGHTING INC.

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ANAHEIM, CA 92801
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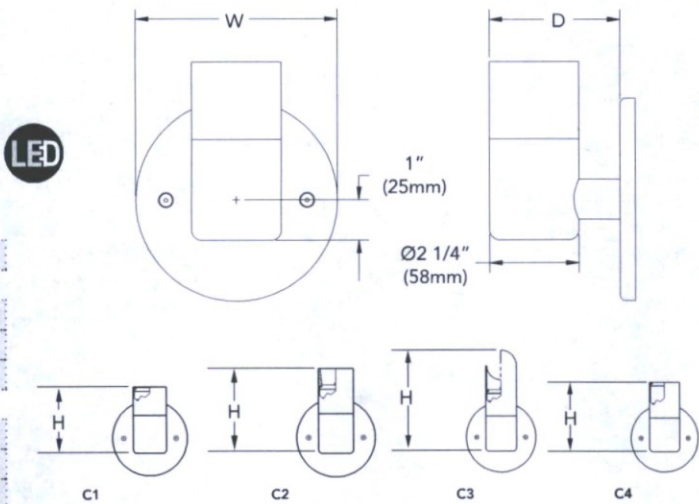
EXHIBITOR SERIES SUBMITTAL	NO.	PART	MATERIAL
CATALOG#: EX(BK,WH)-(SPACING)-(LED CODE)-(G14, S14, G19)	1	EX-UB & EX-UB-LW LEDs	SOLID-STATE LED
DATE: SEPTEMBER 2, 2016	2	EX-VI & EX-VI-LW LEDs	SOLID-STATE LED
DRAWN BY: R.CORDOVA	3	GLOBE	POLYCARBONATE
SCALE: 1:2	4	SOCKET	PBT
WEIGHT: 80g/per PER SOCKET	5	#12 AWG WIRE	PVC WITH PLATED COPPER CONDUCTOR



GEM LED

WINSCAPE® 12V LED16

Specifications	
D:	3-1/4" (83mm) + Mounting
W:	3-1/4" (83mm) w/CN4
	5" (127mm) w/CN5
	2-5/8" (67mm) w/CN6
H:	4-7/16" (113mm) w/C1
	5-7/16" (138mm) w/C2
	7*3/8" (188mm) w/C3
	5-3/16" (132mm) w/C4
Weight	2 lbs (1 kg)



CATALOG NUMBER	
NOTES	
TYPE	

DESCRIPTION

The Gem series is a wet location, Indoor/Outdoor rated, wall mounted luminaire designed to discreetly illuminate in a single direction. Machined from billet aluminum, stainless steel hardware, optically clear heat strengthen borosilicate glass and powder coated with a super durable TGIC powder coat finish, this fixture is designed to withstand the test of time. Designed with a wide range input voltage (11Vac - 14Vac) giving a nearly constant light output to combat voltage drop, yet is dimmable using most standard low voltage magnetic dimmers. LED units and optics are replaceable. This fixture requires a remote 12Vac Transformer, purchased separately, to function.

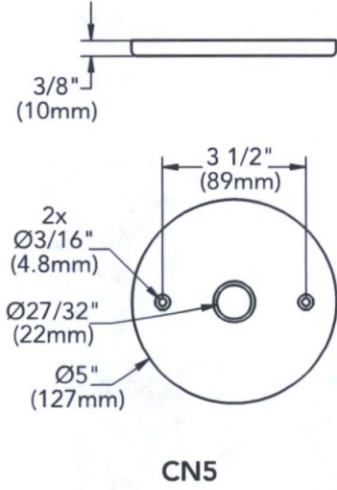
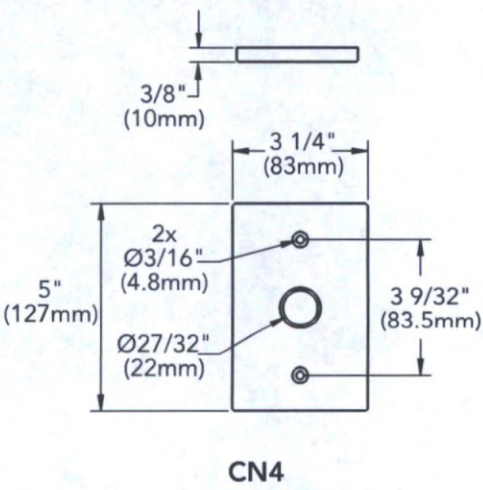
Suitable For Wet Locations

ORDERING INFORMATION

EXAMPLE: GEM 3LED16 40K 12 FL CN5 DNA

Series*		Source*	Color Temperature*		Voltage*	Distribution*		Mounting Accessories*		
GEM	3LED16	LED 3up Round	30K		12'	NSP	Narrow Spot	CN4	Rectangular canopy	
			40K			NFL	Narrow Flood	CN5	Round 5" canopy	
			50K			FL	Flood			
Options ²					External Caps*		Finish*			
<u>Internal Louver</u>			<u>Internal Filters</u>		C1	Short Flush	BL	Black Textured	DNA	Natural Aluminum
IHL	Honeycomb Louver		FA	Amber	C2	Recessed Lens	BRS	Bronze Smooth	NBS ³	Natural Bronze Smooth
<u>Internal Accessory</u>			FG	Green	C3	45" Angle Cut	BRT	Bronze Textured	VET	Verde Textured
L1	Prismatic Lens		FGD	Green Dichroic	C4	Long Flush	CHS	Chrome Smooth	WH	White Textured
L2	Linear Spread Lens		FLB	Light Blue			DBL	Black Smooth	WHS	White Smooth
L3	Softening Lens		FM	Mercury Vapor			DDB	Designer Bronze	CF	Custom Finish
			FMB	Medium Blue						
			FMBD	Medium Blue Dichroic						
			FR	Red						
			FRD	Red Dichroic						

MOUNTING DETAIL



- *Required Fields
- Notes:
- 1 Remote transformer required.
 - 2 Up to 3 Optional items can be specified. Example L1/L2.
 - 3 NBS paint uses specialty pigments to give a natural appearance that may vary by fixture.



9144 Deering Avenue, Second Floor • Chatsworth, CA 91311
Phone: 866.533.9901 • www.hydrel.com

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Rev. 11/2017
GEM_LED

17-UP-2012#4 & 61-UP-1997#5
04/04/2019

PERFORMANCE DATA

LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Light Engines	Dist. Type	Beam Angle	Field Angle	30K				
				Centerbeam Candlepower	Power (Wattage)	Efficacy (LPW)	Delivered Lumens	CRI (Ra)
3LED16	Narrow Spot	10"	28"	2400	5.8	38	220	>83
	Narrow Flood	25"	42"	1000	5.8	37	215	>83
	Flood	40"	70"	750	5.8	36	210	>83

Light Engines	Dist. Type	Beam Angle	Field Angle	50K				
				Centerbeam Candlepower	Power (Wattage)	Efficacy (LPW)	Delivered Lumens	CRI (Ra)
3LED16	Narrow Spot	10"	28"	4200	5.8	55	320	>65
	Narrow Flood	25"	42"	1500	5.8	51	300	>65
	Flood	40"	70"	890	5.8	44	260	>65

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	20,000	40,000	60,000
Lumen Maintenance Factor	1.0	0.92	0.85	0.71

360°



ROTATION

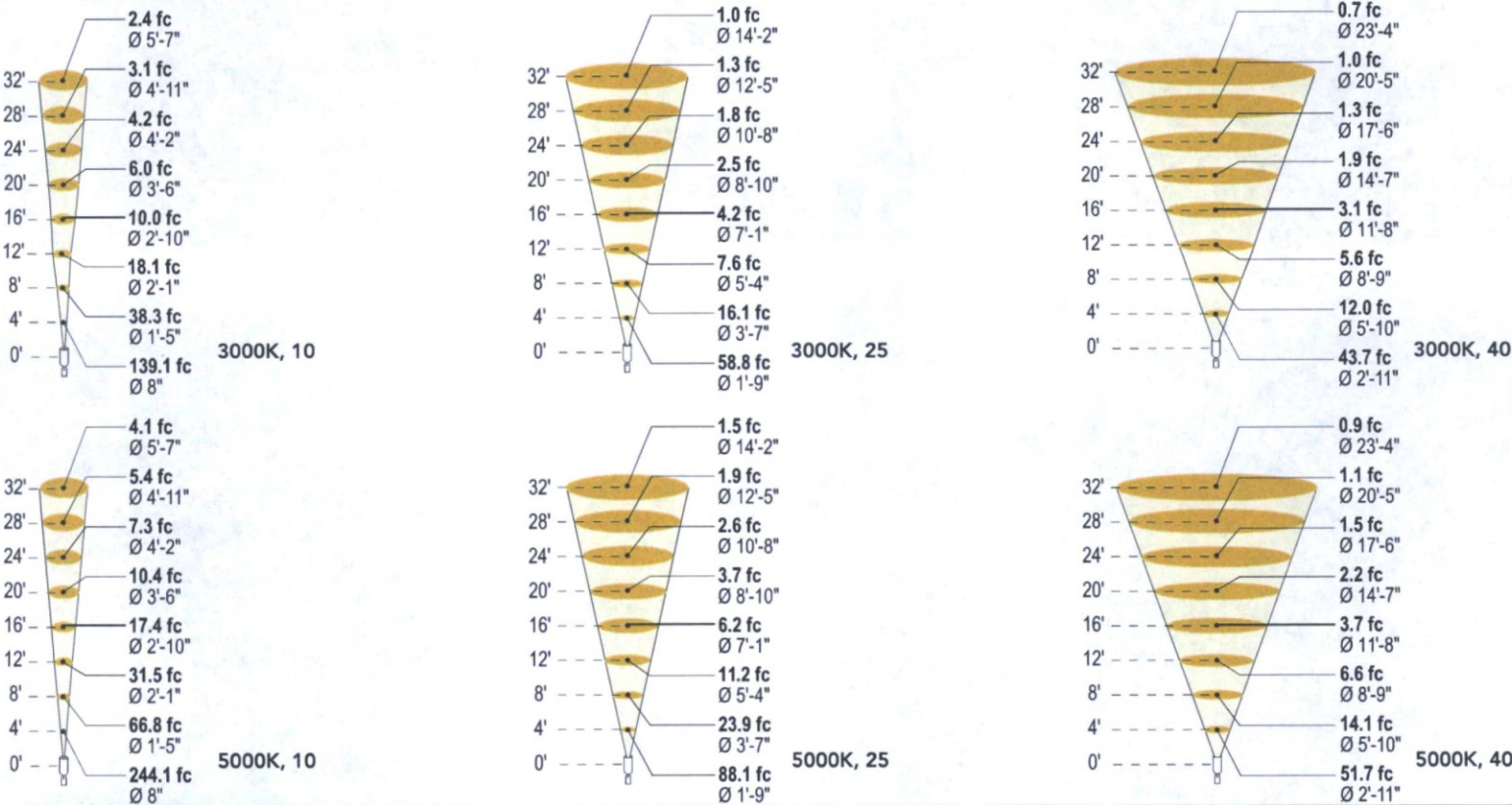
Fixture can point in any direction

LED LIFE: L70/60,000 hours
OPERATING TEMPERATURE: -30°C Through 50°C

PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product, visit www.hydrel.com

Isocandela plots for GEM LED



FEATURES & SPECIFICATIONS

- MATERIAL:** Body, caps, stem and mount plate machined from 6061-T6 aluminum.
- LIGHT SOURCE:** Winscape proprietary replaceable LED unit using three (3) High Output LEDs and an integral low voltage (11V-14V) AC/DC LED light engine and a field replaceable optic. Units have near constant light output when supplied with 11VAC - 14VAC to combat voltage drop. Dimmable using standard LOW VOLTAGE MAGNETIC dimming switch/systems.
- VOLTAGE:** 12 Volt AC.
- DISTRIBUTION:** Available in three (3) beam spreads; 10° Narrow Spot, 25° Narrow Flood, and 40° Flood.
- LENS:** Cut from heat strengthened borosilicate glass for superior clarity and strength.
- MOUNTING:** CN4 for mounting to a rectangular J-box. CN5 for mounting to a 5" Round or octagonal J-box.
- POWER SUPPLY:** Remote 12Vac Transformer, purchased separately.

- FINISH:** Super durable polyester TGIC powder coat finish (standard). Optional zinc undercoat for harsh environments.
- FEATURES:** Field replaceable lens. Any combination of up to 3 lens accessories/color filter/shielding can be specified in any cap style and are held securely by a removable stainless steel clip ring. Fixture comes standard with the Watershed™ lens.
- LISTING:** c ETL us
- WEIGHT:** 2 lbs (1 kg)
- WARRANTY:** 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
- NOTE:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



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